Sea Dragon Rising: The Ascendancy of China's People's Liberation Army Navy

CSC 2003

Subject Area Topical Issues

#### **PREFACE**

Although concern over the so-called "China Threat" has been overshadowed recently by the events of Sept 11, Afghanistan, the potential of nuclear dirty bombs, Iraq, North Korea, and the like, the military modernization of the People's Republic of China bears considerable scrutiny because of its recent acceleration, reminiscent of that of the Soviet Union following the Cuban Missile Crisis. As a Naval Officer, I have chosen to concentrate on the build up of the Chinese Navy—The Peoples Liberation Army Navy (PLAN) because of both personal and professional reasons. My interest was first piqued when, as a Naval Flight Officer on a Maritime Patrol aircraft off Hianan Island, I had a very close encounter with a PLAN F-8 fighter aircraft as it intercepted us in international airspace over the South China Sea. The pilot's high rate of closure and dangerously close CPA resulted in the State Department issuing a formal protest to Beijing. Three months later, that same reckless Chinese pilot would fatally crash his F-8 into an American EP-3, sparking an international diplomatic crisis. Professionally, my interest in this topic was spurred by the words of Sun Tse: "Know thy enemy." In all probability, I will cross paths with the PLAN again, and thus view this endeavor as valuable in terms of Professional Military Education. What I have learned in my research for this project has been both a source of comfort and concern, and I am anxious to share both with the reader. While the modern PLAN is certainly a capable force, it does not currently represent a clear and present danger to America. The PRC's ambitions can never be underestimated, and I reiterate that they bear considerable watching.

LCDR Brian S. Lenk Quantico, VA, January 2003

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate ormation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE <b>2003</b>		2. REPORT TYPE		3. DATES COVE 00-00-2003	RED 3 to 00-00-2003	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Sea Dragon Rising: The Ascendancy of China?s People?s Liberation				5b. GRANT NUMBER		
Army Navy			5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)			5d. PROJECT NUMBER			
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Marine Corps War College, Marine Corps Combat Development  Command, Quantico, VA, 22134-5067				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAII Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	Same as Report (SAR)	44		

**Report Documentation Page** 

Form Approved OMB No. 0704-0188

#### **EXECUTIVE SUMMARY**

Title: Sea Dragon Rising: The Ascendancy of China's People's Liberation Army Navy

Author: LCDR Brian S. Lenk, United States Navy

**Thesis:** Economic reforms, combined with a strategic and doctrinal shift in national defense posture, were the primary causal factors of the ambitious modernization effort undertaken by the People's Liberation Army Navy (PLAN) in the last two decades. Furthermore, media speculation has led to the belief that the PLAN can mount a serious challenge to American naval strength. While the PLAN has developed into a capable force, it does not currently pose a serious threat to the United States Navy.

#### **Discussion:**

Chairman Deng Xiaoping's 1979 economic reforms dramatically changed the character of the Chinese nation. Exponential economic growth in the coastal sectors transformed the PRC from a continental-based nation to a maritime-oriented one virtually overnight. Economic centers of gravity shifted to the coastal sectors, maritime infrastructure thrived, and this new ocean-oriented economy quickly acquired sea-based territories and interests; a strong PLAN was required to defend them.

Beginning in the 1980s, the PRC underwent a series of strategic and doctrinal changes that focused on the attainment of great power status in response to an emerging nationalism as a political force. After centuries of ignoring the importance of the ocean, China's leadership clearly recognized maritime power as essential to the achievement of great power status. A strong PLAN was a prerequisite to maritime power and has been used on numerous occasions in the South China Sea in pursuit of China's maritime ambitions.

The modern PLAN little resembles the small force it once was. From its meager beginnings in 1949, the PLAN has grown into the world's third largest Navy. Numbering nearly sixty combatants, front line units include the Russian-built Sovremennyy-class DDG, Kilo SS, and the domestically produced F-8 Fighter/Interceptor aircraft. Additionally, the annual training and exercise schedule conducted by the PLAN has become much more robust in terms of its size and scope of complexity.

Conclusion: Despite the media's gross exaggeration of the increased capability various platforms give the PLAN, specifically the Kilo SS and Sovremennyy DDG, it is not yet a credible threat to the United States Navy, Moreover, it will remain at the regional level in terms of power projection for the foreseeable future. Much has been written on the PRC's hegemonic actions and aspirations. The dire predictions of some journalists notwithstanding, the PRC, and more specifically the PLAN, simply does not have the technological capability to mount a serious challenge to American naval strength, specifically the modern Carrier Battle Group. However, the PRC is an ambitious nation, and the tides of politics and power change quickly, the PLAN will always bear considerable scrutiny.

# TABLE OF CONTENTS

Economic reform and the birth of a maritime nation	4
Background	5
"The East Asian Miracle"	
Growth of Coastal Economic Centers	8
Beyond the coasts	10
The Mahanian Model	12
Strategic and Doctrinal Change	15
Growing nationalism	15
Emergence of a maritime strategy	17
Evolving Naval Doctrine	
The Spratleysa manifestation of maritime strategy and doctrine	25
The Modern Peoples Liberation Army Navy	
Surface Combatants	
Submarines	31
Aircraft	32
Training and Exercises	33
PLAN Prognosis	
The Perception of threatfiction or reality	
Bibliography	
Annex A: China Map	
•	

The People's Liberation Army Navy (PLAN) has quietly grown into the third largest Navy in the world. Founded by the Chinese Communist Party fifty short years ago, the People's Republic of China's modern force little resembles the coastal defense fleet it once was. Formerly relegated to littoral missions of little importance, the PLAN has never enjoyed a higher position in the PRC than it does today. It receives more government attention, resources, and popular support than ever before. It maintains a modern fleet of advanced combatants, and conducts complex exercises and training. Its top officers count themselves among the elite in political-military leadership, and the PLAN's budget and staffing have risen while the other services have seen their corresponding numbers decrease.

One has to ask what is the reason behind this phenomenal growth? This paper maintains that the PLAN has modernized and expanded for the following two reasons. First, economic reforms instituted in 1979 dramatically changed the character of the Chinese nation. Exponential economic growth in the coastal sectors transformed the PRC from a continental-based nation to a maritime-oriented one virtually overnight. This new maritime-oriented economy quickly acquired sea-based territories and interests, and a heavy dependence on maritime commerce and secure sea lines of communication (SLOC). Thus, a strong PLAN was required to provide secure SLOCs. Second, beginning in the 1980s, the PRC underwent a series of strategic and doctrinal changes that focused on the attainment of great power status in response to an emerging nationalism. After centuries of ignoring the importance of the ocean, China's leadership clearly recognized maritime power as essential in the achievement of this national goal. A strong PLAN was recognized as a prerequisite to maritime power. In the argument of this thesis, we will review the economic reforms and

<sup>&</sup>lt;sup>1</sup> David Goodman and Gerald Segal, <u>China Rising: Nationalism and Interdependence</u> (New York: Prentice Hall, 1997, 8.)

their impact on China's transformation, show how the PRC's strategic and doctrinal changes relate to maritime interests and the quest for great power status, and present an unclassified overview of the modern PLAN highlighting its basic equipment—surface, subsurface and air. Additionally we will examine the media's gross exaggeration of the PLAN's capabilities and offer an analysis on the true capability of the PLAN against the U.S. Navy.

# Economic reform and the birth of a maritime nation

For centuries, China had existed as a continental power. Despite a formidable coastline and early nautical heritage, its interests lay inward on the land rather than the sea, and its weak coastal Navy was a reflection of this focus. When the Chinese Communist Party (CCP) came into power in 1949, it continued this continental-based focus, and by the late 1970s its policies had plunged the country into economic shambles. In 1979 Deng Xiaoping, Chairman of the CCP, set in motion a series of free market reforms that would have a dramatic effect on the Chinese economy, the national character, and ultimately, the PLAN. The Peoples Republic of China (PRC) was quickly transformed from a poor agrarian-focused nation into an increasingly prosperous maritime-oriented one within in a few years. As a result, the PRC today less and less resembles the country that it once was nearly twenty-four short years ago. The coastal regions have experienced explosive economic growth, the PRC has acquired maritime interests in the East and South China Seas to supply its growing economy, it is a leading trading nation, and it boasts a robust maritime infrastructure consisting of one of the world's largest shipping and fishing fleets. Of significant note, its navy has risen from a token coastal defense force to a burgeoning worldclass modern fleet charged with protecting and promoting these recently acquired maritime interests. Thus, Chairman Deng's market reforms directly contributed to the rise and modernization of the PLAN by refocusing the former continental power into a maritime nation.

# **Background**

By virtue of its geography and orientation, China should have developed into a major maritime power much sooner in its history. From the earliest times, it was an innovator in maritime exploration. The Chinese were the first to invent and successfully use the sail, rudder, and compass, well before any European had mastered these complex implements. They had easy and abundant access to the sea as the coastline runs for several thousand miles and is dotted with many islands. Early Chinese mariners explored the surrounding waters extensively, and even began exploratory voyages to far off destinations. It has even been suggested that during the Son Dynasty of 960-1279 AD they fielded the world's most advanced maritime fleet.<sup>2</sup> Despite possessing many of the attributes of a maritime nation, China has spent a good deal of its history oriented as a land based power. This trend began as early as the 1600s, when the Ming dynasty for military, economic, and political reasons, turned China away from the sea and focused all efforts on the security of its borders to the North. All threats were land-based at the time—primarily Mongolian and other Asian nation states—and there was no need to fear an attack from seaward. Additionally, China began a policy of closing its borders to outside contact for political and ideological factors. Western ideals were shunned; no one was allowed in or out, making maritime concerns even less relevant. This practice continued into the Nineteenth century until much more powerful European naval powers forced Chinese borders open militarily. In modern times, the continental trend was perpetuated by the ascension of Chairman Mao Tse-tung's Chinese Communist Party. The CCP's orthodox Marxist economic policies centered on ponderous State Owned Enterprises, (SOEs) and focused on heavy industry and interior agriculture as

<sup>&</sup>lt;sup>2</sup> Cole, 3.

<sup>&</sup>lt;sup>3</sup> Cole, 2.

primary economic activities rather than the sea.<sup>4</sup> Under this centrally planned system, the economy was controlled by the state. A Committee in Beijing made decisions on prices, production goals, and resource allocation. No incentive was offered to the average worker or collective to operate efficiently or innovatively. Created with the intention of making the PRC a self-sufficient Autarky, this Marxist command-based system was a disaster, and by the early 1970s had resulted in an estimated 200 million citizens suffering in the depths of poverty.<sup>5</sup>

#### "The East Asian Miracle"

All of this was to change in 1979, when the Third Plenum of the CCP passed a series of economic reforms championed by its Chairman, Deng Xiaoping. Reversing decades of stagnation, and rejecting predecessor Mao's Marxist economics, Deng stated in an address to the United Nations that year: "To achieve genuine political independence a country must first lift itself out of poverty." In his push for market reforms, Deng inherently understood a concept that was lost on other contemporary communist leaders, the economic theories peddled by Karl Marx were a sham; they simply did not work. He had observed his country rot from the inside under the traditional Soviet-based economic system and knew that reformation must occur, if only for the CCP's self-preservation. The fall of the USSR a decade later validated the Chairman's prescience.

The basic tenet of Deng's reform was *marketization*, specifically the reform of price, ownership, and management mechanisms. The agricultural sector took the first tentative steps when its farmers were allowed to grow their choice of crops, set their own prices based

<sup>&</sup>lt;sup>4</sup> Richard Bernstein and Ross H. Munro <u>Coming Conflict With China</u> (New York: Alfred A. Knopf, Inc, 1997, 56.)

<sup>&</sup>lt;sup>5</sup> Wayne Morrison, "CRS Issue Brief: China's Economic Conditions" 15 July 1998, <www.fas.org>

<sup>&</sup>lt;sup>6</sup> Goodman and Segal, 108.

on prevailing market conditions, and sell their product on the open market—something unheard of during the Mao period. This autonomous freedom to set prices based on the prevailing market provided incentives to the farmers and increased the impetus to exercise initiative. Amazingly, the Chinese economy began to quickly increase efficiency and productivity under these new free market conditions, something rarely, if ever, achieved in a communist system. For the first time it was possible for an individual or family group to have a direct impact on their future, they could improve their quality of life as they worked toward a new concept—profits.

An equally integral part of the reform process was the transformation of the ownership and management structure to include not only the state, but also private, and most importantly, foreign entities. For the first time in the PRC's existence, private individuals and groups were allowed to own and manage a business enterprise. Of significant note, foreigners were allowed to participate in this process. This opened the door to an influx of important capital in the form of Foreign Direct Investment (FDI); the formerly isolationist communist government was taking a bold step in encouraging foreign corporations to actively participate in its economy. Special exclusion zones and tax incentives were introduced, and foreign trade management was decentralized. This allowed direct trading links between the foreign corporation and the local entity, the state was removed from the equation. All of these policies served to make investing in China an attractive option to prospective foreign corporations, and in the process provided a wealth of resources previously unavailable to the economy. Today the PRC ranks second only to the U.S. in

-

<sup>&</sup>lt;sup>7</sup> Gerald Segal and Richard Yang, <u>Chinese Economic Reform, the Impact on Security</u> (New York: Prentice Hall, 1999, 79.)

<sup>&</sup>lt;sup>8</sup> Goodman and Segal,, 108.

FDI, and received nearly \$40 Billion in investment from outside sources in 2002. This was in no small part due to liberal policies promoted by the CCP, and the courting of the international business community by its leaders. Recently retired CCP chairman Jiang Zemin's remarks to a group of international investors in 1999 illustrate this point: "Set your eyes on China. China welcomes you. China's modernization needs your participation, and China's economic development will also offer you tremendous opportunities."<sup>10</sup> The new "Socialist Market Economy" began to have a dramatic effect on the Chinese market. While the PRC had seen its Gross Domestic Product (GDP) grow just five percent in the years 1960-1978, an astounding ten percent growth rate was witnessed in 1979 alone. In the years 1979-1997 the PRC's GDP quadrupled, averaging a nearly ten percent growth rate annually. As one author suggested, "China became an economic powerhouse virtually overnight." Despite experiencing economic downturns, such as the Asian Financial Crisis in the late 1990s, the PRC economy has continued to maintain a steady growth rate. Its recent admission into the World Trade Organization can only be of benefit, indeed, as of the writing of this paper, China's GDP is poised to top nearly \$1.25 trillion. <sup>12</sup> If it sustains this growth rate, the World Bank projects that by the year 2020 China's GDP will again quadruple, making it the world's largest trading economy, second only to the United States.<sup>13</sup>

#### Growth of Coastal Economic Centers

A curious phenomenon occurred in response to the market reforms: the economic centers of gravity, such as they were, began shifting away from the interior and toward the

<sup>&</sup>lt;sup>9</sup> "FDI to China to Top US \$40b in 2002: DBS" Peoples Daily, 19 November 2001, business sec.

Alex Berenburg "In Deng's shadow: The legacy of Jiang Zemin" <u>Harvard International Review</u>; Cambridge; Winter 2002

<sup>&</sup>lt;sup>11</sup> Bernstein and Munro, 57.

<sup>&</sup>lt;sup>12</sup> "China's GDP to Top 10 Trillion Yuan in 2002" Peoples Daily, 09 December 2002, business sec.

<sup>&</sup>lt;sup>13</sup> Morrison.

coastal regions. The bulk of heavy industry became concentrated on the seaboard, and workers, eager to improve their personal conditions, began moving to the coastal cities by the thousands; the urbanization of China's coasts had begun. In response to this major shift, the economic significance of the interior-based agricultural SOEs diminished markedly.

Comprising 95 percent of GDP in 1978, SOEs accounted for merely 35 percent of GDP in 1995. 14

Of major importance, the coastal regions and cities were designated as open markets and thus received special attention from Beijing. Local governments and businesses were given permission to operate under complete free market conditions. Additionally, these regions were designated as Economic Development Zones, and given trade incentives in the form of reduced taxes. Beginning in 1988, the CCP eased controls over imports of raw materials to these regions under its "Coastal Strategy." 15 As a result of these measures trade flourished, and the economies of these regions, composed mainly of individual, collective, and foreign-invested enterprises, grew significantly. In 1999, the coastal regions, despite comprising only 30 percent of the PRC landmass, accounted for over 60 percent of the GDP. 16 A prosperous nation engages in trade, accordingly, China's ports and harbors became home to large shipping fleets hauling over eighty-five percent of the nation's imports and exports. In 1979, China exported \$14 billion worth of goods, ranking it twenty-seventh in the world. By 1997, China's exports had risen to \$183 billion, propelling it to tenth in the world.<sup>17</sup> In concert with expanding maritime trade, China became home to a robust shipbuilding industry. Since entering the international market in the early 1980s, the PRC

<sup>&</sup>lt;sup>14</sup> Goodman and Segal,, 108

<sup>&</sup>lt;sup>15</sup> Goodman and Segal, 113.

<sup>&</sup>lt;sup>16</sup> Swaran Singh, "Continuity and Change in China's Maritime Strategy", <u>Strategic Analysis: Monthly Journal of the IDSA</u>, December 1999 Vol XXIII no. 9, <www.ciaonet.org>.

has grown to claim the number three spot in this profitable industry, producing 4.4 million tons in response to orders totaling \$1.8 billion in 1999.<sup>18</sup> Clearly, the coastal regions prospered under the CCP's ocean-oriented strategy, and became thriving vital economic centers.

#### Beyond the coasts

Home to a population of 1.2 billion, and possessing one of the world's fastest growing economies, China faced a pressing problem: the need for resources to feed its rapidly growing population and supply energy to its exploding industrial base. The challenge China faced to feed its people was formidable, and this continues today. Despite comprising roughly a quarter of the world's population, China only contains seven percent of its arable land, and by 2030 it is predicted that the population will swell to 1.6 billion with food requirements increasing accordingly.<sup>19</sup> Furthermore, the prospects of maintaining or improving this ratio are bleak, as agriculture continues to lose labor, resources, and land to rising coastal development and urbanization. Economic prosperity produced an unintended consequence—a "catch 22" of sorts—rapid growth required additional resources while simultaneously impeding the ability to produce them. The PRC therefore turned to the sea as an alternative food resource to fill this gap. The fishing industry became a vital sector of the economy, and the PRC rapidly grew into the worlds largest fishing nation, producing over twenty-five percent of the world's seafood output, nearly thirty-two million tons annually. Additionally, per capita seafood consumption grew from approximately thirtythree pounds in the early 1980s to nearly forty-five pounds in 1999. 20 As can be expected,

<sup>&</sup>lt;sup>18</sup> Vijay Sakhuja, "Maritime Power of the People's Republic of China: The Economic Dimension" <u>Strategic Analysis: Monthly Journal of the IDSA</u>, February 2001 Vol XXVI no. 11, 3., <www.ciaonet.org>.

<sup>&</sup>lt;sup>20</sup> "China Fisheries and Seafood Exposition",< www.twlcic.com/cm/icm2/ex.htm >04 Dec 02.

this rapid increase began to deplete the fish population along the coastal waters. Therefore, the PRC's fleet began to turn its efforts to the fertile waters of the East and South China Seas. Today these areas are of vital importance as a food source. It is estimated by one study that the Spratleys alone produce five million tons of fish in a typical yearly harvest.<sup>21</sup> Consequently, despite the vehement and sometimes violent protests by other nations laying claim to the islands, the PRC has established several fishing camps and outposts among the Spratleys, and is firm in its claims to these heavily contested and valuable fishing grounds.

China was confronted by the same limited-supply dilemma, as it contemplated its ability to provide the growing economy with natural energy resources. The predominate energy source was, and remains, coal. Comprising 77 percent of the PRC's energy consumption, production of the indigenous fossil fuel has nearly doubled since the adoption of reforms and subsequent economic expansion. Although the PRC possesses sufficient reserves to meet its needs for the time being, in anticipation of eventual depletion, it has begun to utilize other fossil fuel alternatives, mainly oil and natural gas. Despite being the seventh largest oil producer in the world, today the PRC has become a net importer of oil. This is something that troubles its communist government, which still clings to the Marxist tenant of self-sufficiency. Therefore, the CCP has identified energy as critical in the continued development of the economy. Again, as with its food requirements, China looked beyond its coasts to the East China Sea and Spratleys region to acquire additional energy resources to meet future needs. A 1989 survey conducted by China's Ministry of

<sup>&</sup>lt;sup>21</sup> Ji Guoxing "Maritime Jurisdiction in the Three China Seas: Options for an Equitable Settlement" <u>Institute on Global Conflict and Cooperation</u>, October 1995, 6. , <www.ciaonet.org>.

Fereidun Fesharki, Sara Banaszak, Wu Kang, "The Outlook for Energy Supply and Demand in Northeast Asia", <u>Institute on Global Conflict and Cooperation</u>, 1998. http://www.ciaonet.org/srchfrm.html> 10 Dec 2002.
 Andrew Scobell and Larry Wortzel, eds. "China's Growing Military Power: Perspectives on Security, Ballistic Missiles, and Conventional Capabilities", Strategic Studies Institute, (Carlisle Bks, Penn: U.S. Army

War College, Sept 2002), 64. <sup>24</sup> Fesharki, Banaszak, Kang.

Geology concluded that there were nearly 17.7 million tons of oil and natural gas reserves located in the seabed of the Spratley region, making this area home to the fourth largest single fossil energy reserve in the world.<sup>25</sup> This study received enormous scrutiny in Beijing, consequently, China quickly began an ambitious offshore exploration program. Today it ranks as the world's fifth largest investor in offshore mining.<sup>26</sup> Of note, an additional fossilfuel source to meet China's future energy needs may be the enormous amounts of Methane Gas Hydrate thought to be resident in the sea beds of the South China Sea. Currently the technology does not exist to harvest the viscous, waxy hydrate due to the extreme depths of the deposits and problems with liquefaction; however, the PRC has begun pouring millions into research and development with the goal of developing a method to harvest this potential energy source.<sup>27</sup>

#### The Mahanian Model

The great American Naval theorist, A.T. Mahan, wrote in his treatise *The Influence of Sea Power upon History* that a nation must possess six characteristics—Geographical Position, Physical Conformation, Extent of Territory, Number of Population, Character of the People, Character of the Government—if it were to be a true maritime power. <sup>28</sup> By character, Mahan was referring to an inclination toward the sea. It is useful to briefly examine the PRC in this Mahanian framework to illustrate the argument that Deng's economic reforms were chiefly responsible for its transformation from a continental power to a true maritime nation with a powerful navy.

<sup>&</sup>lt;sup>25</sup> Segal and Yang, 141.

<sup>&</sup>lt;sup>26</sup> Fesharki, Banaszak, Kang.

<sup>&</sup>lt;sup>27</sup> Cole, 55

<sup>&</sup>lt;sup>28</sup> Alfred Thayer Mahan, <u>The Influence of Sea Power upon History</u>, 1660-1783, (1890 repr. New York: Hill and Wang, 1985) 25.

The first four of Mahan's characteristics have always been intrinsic to China. Its formidable coastline runs for over 9000 miles and is dotted with approximately 6000 islands. The total coastal territory comprises over fourteen thousand square kilometers, and possesses an extensive inland waterway system suitable for maritime infrastructure. Additionally, the east coast of China is in proximity to three major oceans: the Yellow Sea, East China Sea, and South China Sea.<sup>29</sup> China is blessed with an abundance of excellent natural harbors and ports; approximately 200 deep-water seaports dot the PRC's extensive coastline.<sup>30</sup> Of course, China has always had a large population, and today it ranks as the most populous nation on earth with well over a billion souls. However, despite its proximity to major oceans, thousands of miles of coastline, abundance of ports and harbors, and enormous population, China was not an ocean-going nation. One wonders why this was. For the answer, one must look to the character of its oligarchic government—which also directly influenced the character of its people—as the primary reason for China's failure to become a maritime power. By closing its borders to contact and turning inward away from the sea for centuries, its leaders doomed China to a non-maritime power, and hence, a second-rate status. The early communist government continued this practice, and much the same fate befell the country. China's fortunes changed only when the character of its leaders changed. Chairman Deng recognized the importance of the sea and its trade potential to the future of the PRC and implemented a series of maritime oriented measures promoting economic growth in the coastal sectors and beyond. When the character of the government shifted toward the sea, so followed the character of the people—witness the aforementioned population movements to the coast and exponential growth of maritime infrastructure. The

<sup>&</sup>lt;sup>29</sup> Sakhuja, 3.

<sup>30</sup> Sakhuja, 4.

transformation of the *character of the government and people* towards an inclination for the sea was a direct result of economic reforms. Once these last two Mahanian characteristics fell into place, the formula was completed, and the potential for a thriving maritime nation was born.

China's newly acquired maritime interests in the East and South China Seas were not just economically significant, but rather of vital interest to national security. The PRC viewed—and continues to view—the food and potential energy resources in these areas as key to their very survival. Protecting and securing these interests against competing claims from other South East Asian nations became a matter of national security. Additionally, with 85 percent of its imports and exports borne by ship, the securing of their Sea Lines of Communications (SLOCs) also became of vital interest and required a defensive presence. The Chinese, assessing their weak coastal-oriented naval force, realized that a strong navy with the ability to project power was the only way to accomplish this task. Their newly acquired wealth, provided by a rapidly expanding economy, gave them the means to build and modernize this new navy. Thus, the expansion and modernization of the PLAN was in direct response to the conditions created as a result of the implementation of Deng's economic reforms. Reforms transformed the PRC into a maritime nation with a thriving economy. As the PRC grew, so did the abundance and importance of its maritime interests; a strong navy was required for its defense. Additionally, the wealth generated by China's economic explosion provided the PLAN with the means to grow. Consequently, just as the PRC today little resembles the nation it was twenty-four years ago, the PLAN, boasting modern ships, aircraft, and weapons systems, bears little resemblance to the small, modestly capable coastal force it once was.

# **Strategic and Doctrinal Change**

The growth and modernization of the PLAN can also be attributed to a strategic and doctrinal shift that began in the in the higher echelons of the CCP in the latter part of the 1980s. Fueled by the desire to atone for a century of past humiliation in which aggressor nations repeatedly violated its sovereignty, an emerging nationalism developed in the PRC that drove an aspiration to the achievement of great power status. Central to this movement was the recognition and embracement of a maritime strategy as critical to the achievement of great power status. A robust blue-water navy was an essential element of this quest. Additionally, in concert with the adoption of a maritime strategy, the PRC shifted its defense doctrine towards the maritime arena. The PLAN's battle space was modified from coastal areas to include expansive ocean areas, and an importance was placed on technological modernization. As a result of the PRC's adoption of a maritime strategy and a shift in its defense doctrine, the PLAN has conducted several offensive operations in the East and South China Seas in pursuit of the PRC's maritime interests. Consequently, the navy has risen to a new position of prominence within the PRC.

#### Growing nationalism

The decade of the 1980s was a particularly turbulent one for the PRC. The student democracy movement threatened to usurp nearly forty years of hard-line communist rule. Although the student organizations had some limited success due to the CNN factor of wide exposure and sympathetic coverage the Tiananman Square massacre proved to be the high water mark of this movement, and the resulting clamp down by the CCP was its death knell.<sup>31</sup> The intellectual elite moved away from supporting political reform to embracing an

<sup>31</sup> Bernstein and Munro, 40.

15

emerging aggressive nationalism that focused on the ascendancy of China to its rightful place in the world order. In the latter part of the decade, the phrase "Century of shame and humiliation" began to appear with greater frequency in the essays of the scholarly elite, and quickly became part of the national lexicon. The expression refers to the numerous injustices inflicted upon China by European powers in the Nineteenth century, and the unspeakable atrocities suffered under the Japanese before their eventual expulsion following World War II. Many in China felt that during this period their country was, in the words of Mao Tsetung, "reduced to semi-colonial status and a loose sheet of sand." The population was made to suffer truly dark events, such as, the loss of their entire fleet during a naval engagement with the French in the late 1800s, and the Rape of Nanking at the hands of the Japanese nearly sixty years later.<sup>32</sup> The leadership of the CCP, eager to divert attention away from the potentially dangerous political situation it faced with the student democracy movement, wholeheartedly embraced and promoted this new wave of nationalism as a political force. As the quality of the PRC's economic conditions increased, so too did its national indignation over this humiliation, which was now embedded firmly in Chinese collective conscious due to the CCP's propaganda efforts. Greater wealth and the rise to a prominent position on the world scene emboldened China to conclude that it was time to atone for these past injustices. Collectively the Chinese felt their time had come, and a great power status was their birthright. This quest for great power status, fueled by a perceived history of "thwarted grandeur" became part of the national ethos, and the rallying cry of an emerging nationalism.<sup>33</sup>

-

<sup>&</sup>lt;sup>32</sup> Cole, 38.

<sup>&</sup>lt;sup>33</sup> Goodman and Segal, 10.

### Emergence of a maritime strategy

A key component of Chinese nationalism was the realization of the importance of maritime power as critical to the achievement of great power status. It was maintained that a truly strong nation must have the ability to not only protect its coasts but also to project power to preserve the security of its maritime territories and SLOCs. Chairman Deng strongly postulated that the reason for China's humiliation lay with the Ming Dynasty's abandonment of its early oceanic voyages in the Seventeenth century and the pervading continental focus that ensued up until the late Twentieth century.<sup>34</sup> Had the governments of the Nineteenth century understood the importance of sea power and maritime rights, the repeated violation of China's sovereignty would have been prevented.<sup>35</sup> Although no credible evidence existed to support such an argument, the notion that China would have developed into a great power, if it had embraced a "sense of ocean" 400 years ago began to infuse itself into state conventional wisdom.<sup>36</sup> It was implied that turning away from the ocean had led to a militarily weak and impoverished nation and that the acquisition of maritime power was critical to reversing this.

Just as Deng had rejected the economic theories practiced by his predecessor Mao, he now modified the strategic orientation of his country. During the Maoist period, the primary strategic focus had been on land-based threats, most likely the USSR, with the likely scenario consisting of an ICBM exchange or a massed armor and infantry clash along the northern border. The PRC had no maritime possessions, trade was limited, and its goal was to become economically self sufficient, which further made a maritime strategy irrelevant. The fall of

Goodman and Segal, 11.Scobell and Wortzel, 64.

<sup>&</sup>lt;sup>36</sup> Goodman and Segal, 84.

the Soviet Union, market reforms, and the growth of the PRC into an economic powerhouse had dramatically changed the strategic picture. The threat of a major land war was removed, and the focus now moved to the threat of low-intensity maritime clashes at the regional level with periphery nations.<sup>37</sup> China now had vital maritime interests spread among the East and South China Seas, and a consequent dependence on the SLOCs of these areas, through which a preponderance of its trade was moved. Protecting and preserving these maritime interests against the competing claims of periphery nations became vital to the maintenance of the PRC's emergence as a great power and a matter of national pride. In response to the nationalistic calls for great power status and a strong maritime focus, the CCP began an intensive propaganda program to promote a "sense of ocean" among the public. State propaganda attempted to portray the PRC as both a strong continental and a maritime power. A haiyang Yishi, or education campaign, was introduced to promote the sea power mentality and illustrate the criticality of it in promoting the continued expansion of China. The academic elite, often a highly influential force on a nation's policy, introduced the concept of "blue culture" in their scholarly writings. This culture was heralded as modern and forward thinking as it represented progress toward economic wealth and consequently super power status. This was in contrast to the "yellow culture" of the Mao period, which was portrayed as backward and inward looking, stale and ponderous.<sup>38</sup> Establishing this contrast served to heighten the enthusiasm of nationalism sweeping the country. The Chinese public not only understood the importance of a strong navy but demanded it, even going as far as to voluntarily donate several million Yaun toward the building of China's first aircraft carrier,

<sup>&</sup>lt;sup>37</sup> Cole, 161.

<sup>&</sup>lt;sup>38</sup> Goodman and Segal, 85.

the ultimate symbol of great power status.<sup>39</sup> This contrasting of a failed policy with the hope of further prosperity and connecting it to nationalism was a very perceptive and successful policy that ultimately moved China forward and kept its leaders in a position of power.

The emerging recognition of a maritime strategy also began to manifest itself in the writings of influential military leaders in PLA professional journals. Chinese naval officers, openly embracing Western notions, began making repeated references to the century-old theories of a particular American maritime strategist by the name of Alfred Thayer Mahan. In fact, one prolific author, Admiral Liu Huaquing, commander of the PLAN from 1982-1987 and later Vice Chairman of the Central Military Commission (CMC), quoted the venerable American admiral so often, he became known as the "Chinese Mahan." 40 Huaquing, as the top naval officer in the CMC, vehemently argued that sea power was a crucial element of super power status. His comments in 1995 clearly illustrate this point: "A nation not understanding the importance of the ocean is a nation without a future. A major sea-power incapable of defending its sea territorial rights will not be a major sea power for long."41 The acquisition of an abundance of maritime possessions had made China into a formidable and rising power; Huaquing maintained that a strong PLAN was needed in order to preserve the PRC's ascendancy. His persistence would prove to be a major catalyst in the rise of his service.<sup>42</sup>

### **Evolving Naval Doctrine**

In alignment with its continental focus, the People's Liberation Army (PLA) served as the dominant military service in the PRC. Owing to a parochialism that certainly is not

19

<sup>&</sup>lt;sup>39</sup> Goodman and Segal, 86.

<sup>&</sup>lt;sup>40</sup> Vijay Sakhuja, "Dragon's Dragonfly: The Chinese Aircraft Carrier", <u>Strategic Analysis: Monthly Journal of</u> the IDSA, October 2000 Vol XXIV no. 7, 3., <www.ciaonet.org>

<sup>&</sup>lt;sup>41</sup> Cole, 9.

<sup>&</sup>lt;sup>42</sup> Sakhuja, 4

uncommon in other militaries, the Red Army leaders had always moved to counter the maritime ambitions of the PLAN. The PLA, indoctrinated into the Soviet school of maritime operations, relegated the PLAN to coastal defense role and limited the fleet to a small force of patrol-type surface ships and coastal submarines. Beginning in the decade of the 1980s, amid the ongoing economic and maritime revolutions and the compelling politics of nationalism, the PLA had no choice but concede to the ascendancy of its sister service. The promotion of the aforementioned Admiral Huaquing to the PRC's second most important military post, CMC Vice Chairman, was a seminal event in the PLAN's history. Never before had it enjoyed such a well-placed and strong naval proponent. As a result of Huaquing's efforts and the subsequent development of maritime strategic thought, the PRC's national defense doctrine shifted toward a maritime focus and an emphasis on the PLAN.

The first doctrinal shift can be traced to the early 1980s when the PLAN redefined its battle space. Prior to this, its main missions had centered upon the littorals: offshore patrol, anti-smuggling, piracy, illegal immigration, and search and rescue. Under Huaquing, the doctrine of "Offshore Active Defense" was introduced. The PLAN was now responsible for the "First Island Chain" defined an area extending from China's coast out to a line that ran through the Kurile Islands, Japan, the Spratleys, Taiwan, Borneo, and the Philippines. This area encompassed the whole of the PRC's vital maritime interests, including SLOCs, in the Yellow, East, and South China Seas (see Annex A). Huaquing further set an even more ambitious goal of having the PLAN extend its influence to the "Second Island Chain" by 2020. This boundary is defined by a line drawn from the Kuriles through Japan, the Bonins,

<sup>&</sup>lt;sup>43</sup> 'Maritme Power of the People's Republic of China' <u>Strategic Analysis: Monthly Journal of the IDSA</u>, February 2001 Vol XXIV no. 11, <www.ciaonet.org>

<sup>44</sup> Cole, 166.

<sup>&</sup>lt;sup>45</sup> Cole, 167.

Marianas, and Carolines and would include most of the West Pacific. The achievement of this ambition would bring a true blue-water capability to the PLAN. The basic tenet of the doctrine was the notion of a *defense in depth* by the combination of a robust shoreline resistance, mobile Naval warfare, and guerilla attacks at sea. It was reasoned that the nominal twelve nautical mile buffer that normally defined the PLAN area of responsibility would be insufficient to thwart a potential attack. This emphasis on maritime battle space was a significant event, for it was the first time that the PRC had focused its defense emphasis seaward and officially acknowledging the importance of its maritime interests. He modern PLAN. Several coastal air stations were established to support the PLAN air force's (PLANAF) growing fleet of soviet-variant interceptor aircraft. Additionally, several surface ships and submarines, both conventional and nuclear, were acquired to patrol the PLAN's newly defined AOR.

The 1991 Persian Gulf War was a shocking revelation to CMC leaders, who were awed by the overwhelming technical superiority the American military displayed on the field of battle. This event, perhaps more than any other, was the major impetus for the PLAN's subsequent doctrinal change that was given the moniker "modern war under high-tech conditions." Truly stunned by the ability of the U.S. military to so completely dominate the battlefield, the CMC quickly decided to embark on an ambitious military modernization program in which the PLAN figured prominently. In response to this call for modernization, the CCP poured billions into its military and increased defense spending an astounding 159

<sup>&</sup>lt;sup>46</sup> Cole, 166.

<sup>&</sup>lt;sup>47</sup> Goodman and Segal, 71.

percent for the years 1984-1994.<sup>48</sup> The PLAN, now possessing the means to upgrade, began an aggressive acquisition program of mainly Russian equipment. Modern war ships with sophisticated target, acquisition, anti-surface, and anti-air weapon systems were incorporated into the fleet. The submarine force was enhanced with the addition of quiet and powerful diesel electric boats. The PLANAF was upgraded with indigenously produced fighterinterceptor and maritime-attack aircraft. Additionally, in the recognition of the importance of multi-dimensional warfare, Airborne Early Warning and Over the Horizon Targeting capabilities were introduced as well. 49 As the leaders of the PLAN contemplated the role their service would play under this new philosophy of a high-tech war, a re-characterization of the battle space was again implemented. The doctrine, fully embracing China's emerging maritime strategy and ambitions, shifted the mission of the PLAN from a role of active defense to that of power projection. Similar to the U.S. Navy, the PRC began to see the PLAN as much more than a naval force. It had become an instrument of national strength, a tool of foreign policy to be used in the high stakes game of statecraft. Power projection became the primary driving force of Chinese defense doctrine, for it was understood that the best way to achieve political results was through the use of the Navy. 50 If the PRC was challenged in the Spratleys, for instance, new strategic thought dictated a quick decisive strike, achievement of the desired political result and a rapid withdrawal before the arrival of an American Carrier Battle Group. This was comprehended very early in the process by the PLAN leadership. In 1991 PLAN Vice Chief of Naval Operations, Admiral Cheng Ming stated: "Such a function of projecting power has made the Navy a most active strategic force

-

<sup>&</sup>lt;sup>48</sup> Bernstein, 70.

<sup>&</sup>lt;sup>49</sup> Goodman and Segal, 74.

<sup>&</sup>lt;sup>50</sup> Goodman and Segal, 76.

in peace time, a pillar for foreign policy initiatives, and the embodiment of a countries will and power."51

In the 1990s, the PLAN took several steps to accomplish this power projection role. In recognition of the Spratley region's vital strategic significance, a majority of the PLAN's assets were moved to the South Sea Fleet Base north of Hianan Island, including several PLANAF assets. Additionally, the PRC placed a military forward presence in the South China Sea with the creation of the Spratley Maritime Surveillance Command. Of significant note, this new command was stood up at the divisional level rather than the regimental level, meaning full Captains instead of lower ranking officers would be charged with leading the PRC's garrisons on the Paracels and Spratleys. 52 This speaks volumes about the strategic importance of this region to China, and the prominence of the role accorded to the PLAN in its defense. Long criticized for lacking amphibious capability, the development of a modern marine corps based on the U.S. model was enacted. The acquisition of several new landing ships, development of amphibious doctrine, and successful landing exercises made the marines a viable force, that the PLAN quickly integrated into its operations and training. Although, perhaps, not a credible threat to Taiwan, this capability gave the PLAN the ability to provide a fast reaction force to any crisis that may have arisen over its claims in the Spratleys.<sup>53</sup>

During this period, the PLAN started the quest for the ultimate power projection apparatus, the modern aircraft carrier (CV). The PLAN first recognized the need for carrier-

Goodman and Segal, 78.Goodman and Segal, 79.

<sup>&</sup>lt;sup>53</sup> Srikanth Kondapalli, "China's Naval Structure and Dynamics" Strategic Analysis: Monthly Journal of the IDSA, October 1999 Vol XXIII no. 7, <www.ciaonet.org>.

based air in 1988, when it could not provide maritime strike capability to its surface forces during the clash with the Republic of Vietnam in the Spratleys.<sup>54</sup> Since then it has taken steps to remedy this situation, most notably the development of an indigenously produced fighter-bomber modified to carry the C-801 missile, and the stationing of SU-27 fighter aircraft at forward airfields on Woody Island in the Spratleys. However, these measures fall far short of a modern Carrier Air Wing's combat power. The arrival of two U.S. carrier battle groups in the East China Sea during the 1996 Taiwan Straits Crisis and the PLAN's inability to effectively counter them further provided impetus for the acquisition of a CV.<sup>55</sup> The quest has not been achieved as of yet, but the PLAN is still actively pursuing this option. Several scrap CV hulks have been purchased from Russia for study, and there has been documentation of carrier-simulator training conducted by PLANAF pilots and senior officers. Noting that the PRC contains the third largest shipbuilding industry in the world, press speculation points to the production of an indigenously produced carrier within the next 5-10 years. Because of the complicated nature of carrier operations, however, the PRC's ability to achieve this remains in question.<sup>56</sup> For the intermediate future, the PLAN will lack a CV capability; however, the active quest for this power projection capability is an important indicator of the shift in its strategic thinking. The PLAN also adjusted its exercise and training programs to incorporate the mission of power projection. Its naval exercise scenarios dramatically increased in the scope of their complexity during the 1990s. Exercise planners now began to include the problems associated with multidimensional warfare land, air, space—as well as surface and subsurface scenarios in typical training evolutions.<sup>57</sup>

<sup>&</sup>lt;sup>54</sup> Sakhuja, 3. <sup>55</sup> Cole, 147.

<sup>&</sup>lt;sup>56</sup> Cole, 108.

<sup>&</sup>lt;sup>57</sup> Goodman and Segal, 74.

With the creation of a marine corps, amphibious exercises also began to receive a higher priority and pointed to the Spratleys or Taiwan as the most likely use of such an operation. Of significant note, the concept of Joint operations was introduced during this decade as well, and represented a major step forward in sophistication for the PLAN and the PLA in general.<sup>58</sup> Due to a strong parochialism residing within each service, combined operations until this period had been limited at best. The last decade witnessed an abundant increase in joint interoperability between the PLAN and its sister services, and this new *jointness* gave the PLAN an overwhelming advantage over the navies of its South East Asian rivals.

# The Spratleys...a manifestation of maritime strategy and doctrine

In response to rising economic and great power ambitions, the Chinese version of *Lebensraum*, or living space, became a key component in the PRC's national security calculus. Liu Zhenhuan, the director of the Naval Military Research Institute in Beijing, best summarized this concept when he stated: "Despite having the world's fourth longest coastline, fifth largest continental shelf and tenth largest economic exclusion zone, the ratio of maritime space compared to land size is only one half of the world's average." Hence, the PRC felt fully justified in its military and economic expansion into the South China Sea (SCS), and in 1992, the CCP issued its self-proclaimed "Law on Territorial Sea and the Contiguous Zone." Under this precept, the PRC claimed several territories in the SCS region, including the Spratleys, as falling under Chinese sovereignty. At the time, several other countries including Vietnam, Malaysia, Indonesia, Brunei, and the Philippines also claimed many of these islands. These nations sought to use the Spratleys for the same reason as the PRC did—energy and resources.

<sup>58</sup> Cole, 141.

25

<sup>&</sup>lt;sup>59</sup> Singh, 2.

The PLAN has played a key part in the manifestation of the PRC's strategic and doctrinal shift and its quest for Lebensraum several times over the last two decades, as witnessed by its aggressive military actions in the SCS. In contrast to its early years, the PLAN has conducted several offensive operations in the Spratley region in pursuit of China's maritime ambitions. In 1988, the naval forces of China and Vietnam clashed in response to a dispute over Fiery Cross Reef. The engagement was a victory for the PLAN resulting in the deaths of seventy-two Vietnamese sailors, the permanent occupation of the disputed reef, and most importantly, control over the valuable offshore oil fields in proximity to the reef.<sup>60</sup> Since that fatal battle, cooler heads have prevailed in both governments, and a formal treaty was signed in 1999. Despite this, the PLAN still actively patrols the contested areas, and as one author states, the two countries are continually at risk to "come to blows" over oil rigs in the Spratleys. 61 In recent years, the PRC has pursued its maritime claims over the vehement protests of the Republic of the Philippines (RP) as well. The best-documented case is the PLAN's actions on Mischief Reef, which lies 140 nautical miles from the RP and well within their Economic Exclusion Zone (EEZ). According to the UN Convention on the Law of the Sea, this island should rightfully belong to the RP. However, the PLAN completely militarized the small reef, constructing buildings, communications stations, possible sensors and helicopter platforms.<sup>62</sup> In recent years, the same disturbing occurrences have taken place on another rightful RP possession, Scarborough Shoals, located just 122 nautical miles off Luzon, and also within their EEZ. 63 The RP Navy was, and remains, woefully unprepared to counter any PLAN threat with direct action. The presence of the PLAN has

<sup>&</sup>lt;sup>60</sup> Cole, 40. Cole, 41.

<sup>62</sup> Cole, 43.

<sup>&</sup>lt;sup>63</sup> Cole, 43.

allowed the PRC to act with impunity in this area. Consequently, many China-watchers conclude that this was the primary reason that led the RP to ratify the Visiting Forces Agreement (VFA) with the United States.<sup>64</sup> Manila felt that the defense relationship accorded by the VFA would give them some advantage in their dealings with China. So far, this strategy has not come to fruition, as the United States under the Clinton administration's policy of engagement sought to avoid direct confrontation with the PRC whenever possible. This diplomatic quagmire has not been challenged under the Bush Administration, as it now needs China's cooperation in subduing North Korea and does not want to disturb what is a positive commercial and trade relationship.

The other periphery nations laying claim to these islands—Malaysia, Indonesia, and Brunei—also clearly recognized the disadvantage in which they found themselves. China's position was apparent and simple: it claimed all of the Spratleys. The nations that could afford one began a naval modernization program of their own. Some, such as Malaysia, began to reinforce its existing settlements. Others, such as Indonesia, sought to enter into an ever-increasing framework of treaties to resolve the situation. In the opinion of this author, the Chinese in moves reminiscent of Nazi Germany and the Munich Peace Conference of 1939 have only honored these treaties when it was convenient to their interests and goals.

Thus, the rise of the PLAN can also be directly attributed to a strategic and doctrinal shift in the PRC's national security calculus. Nationalism as a political force fueled the Chinese quest for the attainment of great power status. The PRC's leadership fostered this spirit of nationalism and recognized that maritime power would play an integral part in the

<sup>&</sup>lt;sup>64</sup> Cole, 44.

<sup>&</sup>lt;sup>65</sup> Segal and Yang, 169.

elevation of the Chinese state to a super power status. The nation's best military minds redefined the PRC's national defense mindset and expanded the battlefield seaward. A robust PLAN played a key part in this defense strategy and was modernized accordingly. The PRC's hegemonic actions in the South China Sea have gone unchecked solely due to its ability to project power into the region, and the PLAN was the primary instrument of this power projection.

# The Modern Peoples Liberation Army Navy

The modern PLAN little resembles the small force it once was. At its inception in 1949, the newly formed PLAN had a total fleet force of one Light Cruiser, two Destroyers, twelve Frigates, and an assortment of small gunboats and auxiliaries. By 1960, with the helping hand of the Soviet Union, the PLAN had expanded to a modest force consisting of approximately twenty Destroyers and Frigates, and twenty-six submarines, all of Soviet make. When Russian assistance ended in that year, the Chinese embarked on an indigenous shipbuilding program; however, this effort was not very fruitful, and by 1970, the PLAN still maintained the same force structure of the previous decade. All of this was to change when, beginning in 1980, the PLAN embarked on its modernization effort under the overview of Chairman Deng Xiaoping. Twenty-two years later, the modern PLAN is a robust force numbering 290,000 personnel, sixty destroyers and frigates, fifty diesel and nuclear submarines, forty amphibious ships, 350 auxiliary ships, and a Naval air arm consisting of 500 fix-winged aircraft and fifty helicopters. In addition, the PLAN also possesses a sizable fleet of landing craft that are capable of being used in an amphibious invasion.

#### Surface Combatants

The PLAN's newest flagship, and representative of the modernization effort, is the recently acquired Russian-built Sovremennyy-class Guided Missile Destroyer (DDG). The addition of two of these formidable combatants has greatly improved the surface capability of the PLAN. Each Sovremennyy is equipped with the deadly SS-N-22/Sunburn anti-ship missile, whose supersonic speed and unique homing sequence make it nearly impossible to

<sup>&</sup>lt;sup>66</sup> Bernard D. Cole, Great Wall at Sea (Annapolis, Maryland: Naval Institute Press, 2001), 96.

<sup>&</sup>lt;sup>67</sup> Office of the Secretary of Defense, <u>Annual Report on the Military Power of the People's Republic of China, 2002</u>, (Washington, D.C: 2002), 19.

defend against. Providing a much need anti-air capability to the PLAN, the Sovremennyy is also equipped with the SA-N-7 Gadfly weapon system. Four 30-millimeter rapid-fire radar guided cannons, a 130-millimeter dual-purpose gun, torpedoes, and mortars complete the ship's armament. 68 Of note, sources indicate that the PRC has signed a contract with the Russians for the delivery of an additional two Sovremennyys, which will provide their fleet with even greater capability. <sup>69</sup> Following the Sovremennyy, the PLAN's tier-two surface platform is the Chinese built Luhu-class DDG. Introduced in the 1990s, the two existing hulls are powered by American-made gas turbine engines, and possess modest anti-air, surface, and subsurface weapon systems. Additionally, the PLAN still maintains sixteen of its Luda-Class DDGs, which entered the fleet in 1971. While these ships have a formidable surface-attack capability, they are completely lacking in anti-air weapons except for two hulls that were retrofitted with the French-built Crotale missile system. 70 Following the Tiananman Square Massacre, American sanctions forced the PLAN to look elsewhere for the Luhu's power plants, it was widely felt this was the main reason for the development of the Luhai-class Destroyer, first commissioned in 1999.<sup>71</sup> Displacing nearly twice the amount as the smaller Luhu, the new Destroyer-class is equipped to handle bigger Russian-made gas turbine engines. Although significantly larger, the single Luhai hull in the fleet boasts similar weapon systems to the existing Luhu-class. The new Jiangwei-class and older Jianghu-class guided-missile frigates complete the PLAN's major surface combatant order of battle. Introduced in 1991, the Jiangwei was a marked improvement over the Jianghu, which

<sup>&</sup>lt;sup>68</sup> Cole, 99.

<sup>&</sup>lt;sup>69</sup> OSD, 19.

<sup>&</sup>lt;sup>70</sup> Cole, 100.

<sup>&</sup>lt;sup>71</sup> Cole, 101.

contained no anti-air defense and a very limited anti-subsurface capability.<sup>72</sup> The Jianghu will eventually be phased out as the PLAN is reportedly in the process of developing a new class of a domestically produced frigate, which is scheduled to enter the fleet by 2010.<sup>73</sup>

#### **Submarines**

The PLAN maintains a strong submarine force; however, the majority of it is composed of the older Soviet designed Romeo-class diesel-electric (DE) submarine. Additional DE submarines consist of two domestically produced models, the Song and Mingclass submarines. While the Ming is essentially a re-engineered Romeo, the Song is an original PLAN design, and has several modern improvements, including a skewed sevenbladed propeller to reduce cavitation and the ability to launch an anti-ship cruise missile.<sup>74</sup> Furthermore, the PLAN has dramatically upgraded its conventional submarine capability with the acquisition of four Russian-built Kilo-class submarines, thought to be one of the quietest submarines in the world.<sup>75</sup> The advanced weapons systems of the Kilo, such as, the 53-65KE wake-homing torpedo and its nearly silent quieting technology, combine to give the PLAN a highly effective platform in littoral environments. The PLAN's fleet of nuclear powered submarines consists of six platforms, five fast-attack (SSN) Han-class, and one Xiaclass ballistic missile submarine. The Xia is armed with long-range nuclear-tipped ballistic missiles and a medium range variant is scheduled for deployment in 2003.<sup>76</sup> Additionally, the PRC is in the process of developing a next-generation SSN called the Type 093. Slated

<sup>&</sup>lt;sup>72</sup> Cole, 102.

<sup>&</sup>lt;sup>73</sup> OSD, 19.

<sup>74</sup> OCD 21

<sup>75 000, 21.</sup> 

<sup>&</sup>lt;sup>76</sup> OSD, 27.

for operational deployment in 2005 and armed with wire-guided and wake homing torpedoes, the new SSN will rely heavily on Russian engineering design.<sup>77</sup>

### Aircraft

The PLAN's air force (PLANAF) is one of the largest in the world, operating several hundred Russian and domestically designed aircraft from its coastal air stations. The PLANAF's tactical aircraft include the 1950s vintage Soviet Mig-19-based F-6, Soviet Mig-21-based F-7, and the domestically produced F-8. Chinese fighter pilots have continued to hone their combat and aerial skills, and in 2000 conducted the first successful aerial refueling mission between an F-8 and a tanker over the South China Sea.<sup>78</sup> This has significant ramifications for PLAN power projection in this area. Previously combat time on station was limited due to the extreme distances of operating bases, the advent of air-air refueling completely alleviates this problem. This recent success not withstanding, the latter aircraft recently became rather infamous when an F-8 collided with an American EP-3 off the coast of Hianan Island in April of 2001, sparking an international crisis. The subsequent standoff between Beijing and Washington over the American crew's detainment dramatically soured Sino-U.S. relations. The PLANAF has not yet taken delivery of the Russian fourthgeneration Su-27 or Su-30 MKK fighter aircraft currently operated by China's Air Force; however, these aircraft are expected to be rapidly integrated into naval operational units.<sup>79</sup> Additionally, the Chinese are currently developing a domestically produced fighter known as the J-10. Similar in performance to the Eurofighter 2000, the J-10, as CNN states: "represents

<sup>&</sup>lt;sup>77</sup> OSD, 22. <sup>78</sup> OSD, 3.

<sup>&</sup>lt;sup>79</sup> OSD, 3.

a dramatic step forward for Chinese military aviation." <sup>80</sup> The fighter will enter operational service in 2005 in both a Naval and Air Force version. The PLAN also operates the Y-8 maritime aircraft, which is based on the Soviet "Cub" transport aircraft. A selected number of the Y-8s have been modified to conduct the airborne early warning mission, as well as rudimentary under sea warfare. The PLAN's fleet of B-6 aircraft, which are equipped with anti-surface cruise missiles, carry out maritime strike missions, and are augmented with FB-7 fighter-bombers. A follow-on maritime strike aircraft, the FBC-1, will likely replace the PLANAF's existing inventory of B-6 strike aircraft sometime within the decade.<sup>81</sup> Additionally the PLANAF operates a large fleet of helicopters, and was the first PLA service to do so. 82 Models include the French Super Frelons and Dauphins, both used in an under sea warfare role. France granted the PRC a license to produce these helos domestically in the 1990s, and since then, the PLAN has received over 120 Chinese-built models.

#### Training and Exercises

Today the PLAN is a modern fleet replete with the latest in Russian military hardware as well as domestic technology. The annual training and exercise schedule conducted by the PLAN has become much more robust in terms of size and the scope of complexity as well. The concept of *jointness* has been introduced and embraced by the PLA leadership, and PLAN's exercise schedule reflects this. Training, which is focused on maritime and amphibious operations, has begun to integrate normal ground army units, marines, PLAN forces, and special operations forces into the exercise scenario on a regular basis. 83 Of

<sup>80</sup> CNN "Pentagon warns of China threat" 17 July 2002, <www.cnn.com>

<sup>81</sup> Cole, 107. 82 Cole, 107,

<sup>&</sup>lt;sup>83</sup> OSD, 2.

particular interest has been the recent emphasis on amphibious operations, pointing perhaps to a to an increasing focus on the Taiwan problem as well as a Spratleys scenario. Although the PLAN currently only possesses 18 Landing Ships with the ability to embark approximately 3800 troops, it is researching a program to retrofit merchant ships to serve as amphibious troop carriers in a time of crisis. In anticipation of this, merchants have participated in every amphibious exercise since 1994.84

<sup>&</sup>lt;sup>84</sup> Cole, 103.

### **PLAN Prognosis**

Economic reforms and great power ambitions provided the major impetus for the PLAN's modernization and growth. While the PLAN has certainly grown into a capable and robust force, it is maintained that it still is not a credible threat to the United States Navy. Moreover, it will remain at the regional level in terms of power projection for the foreseeable future. Much has been written on the PRC's hegemonic actions and aspirations, and in the process the media has grossly exaggerated the PRC naval threat. The dire predictions of journalists, such as Bill Gertz and the like aside, the PRC and more specifically the PLAN simply does not have the capability to mount a serious challenge to American naval strength, specifically the modern carrier battle group (CVBG).

# The Perception of threat....fiction or reality

Whether warranted or not, there is a common perception among Americans and the world of the so-called China threat to the United States. Perhaps the best-known promoter of this threat is *Washington Times* reporter Bill Gertz. In his book *The China Threat - Target America*, he declares "The Peoples Republic of China is the most serious national security threat the United States faces at present and will remain so into the foreseeable future." Gertz further comes to the ominous conclusion that "this grave strategic threat includes...even the possibility of a nuclear war that could cost millions of American lives."

In addition to the overall threat postured by Mr. Gertz, there is the misperception that the PLAN poses a legitimate threat to the United States Navy. Before debunking this, we will examine why this perception exists. As with any subject, the world's media has heavily

<sup>&</sup>lt;sup>85</sup> Bill Gertz, <u>The China threat – Target America</u>, (Washington D.C: Regnery Publishing, Inc, 2000) 199.

<sup>&</sup>lt;sup>86</sup> Gertz, p 199.

influenced the issue of a China threat, particularly a PLAN threat. Much has been made of the PLAN's acquisition of the Russian Kilo SS submarine and the Sovremennyy guided missile destroyer. While certainly capable platforms, many of the world's media outlets have grossly exaggerated the impact of these new acquisitions. For example, in reporting on the Russian sale of the Kilo to the PRC, the Washington Post's headline read, "China to buy 8 more Russian Submarines...would Aid a Blockade of Taiwan, Challenge U.S. Power in Region." The article went on to cite sources as saying that the Kilos would be able to mount a challenge to U.S. naval supremacy in the nearby seas.<sup>87</sup> A similar headline by the *Glasgow* Herald: "China's submarine threat could tip power balance." This article cited an expert as stating, "acquiring eight more submarines would very significantly enhance China's ability to influence events in the East China Sea.<sup>88</sup> The London Times in reporting on this subject proffered the following quote in its coverage: "No commander in his right mind would send a carrier group into the strait when there's a dozen Chinese submarines circling, it completely changes the situation."89 This was in reference to the 1996 Taiwan Straits crisis in which two American carrier battle groups were sent in response to the PRC's aggressive actions toward Taiwan. The Australian News Party had the following as its headline: "Silent Subs gives China Edge." They further quoted a western diplomat as saying that the sale of the subs represented a "quantum change and the U.S. Navy would be less able to act as Taiwan's security guarantor."90 The media coverage of the Sovremennyy is very similar. Navy News Week reported in its story "China buys Russian Vessels to Mount Naval Challenge to U.S." that "China is planning to buy top-of-the line Russian warships to block U.S. attempts to

<sup>&</sup>lt;sup>87</sup> John Pomfret, "China to Buy 8 More Russian Submarines", The Washington Post, 25 June 2002.

Ian Bruce, "China's submarine threat could tip power balance." The Glasgow Herald. 26 June, 2002. Oliver August, "Taiwan Fears grow as China buys new subs" The London Times, 12 June 2002.

<sup>90 &</sup>quot;Silent Subs deal gives China Edge" The Australian, 13 June 2002.

confine the fast-growing expansion of Chinese Forces." Furthermore, a *Washington Times* article (written by Bill Gertz) reporting on the Sovremennyy's SS-N-22 anti-ship missile states the following: "The new supersonic cruise missile is part of China's naval buildup, which Pentagon analysts say is focused on developing the capability to sink U.S. warships."

What these journalists fail to report is the entire story. Yes, the PLAN's premiere surface combatant is the new Sovremennyy guided missile destroyer. However, despite having a formidable surface-surface capability, the destroyer has modest anti-air and subsurface capability. Its SA-N-7 anti-air system has a maximum range of 15 nautical miles, making it of limited use for significant area-defense coverage. 93 This platform would stand little chance in an engagement with an American CVBG. Its limited air and subsurface defense capability would make it an easy target for an air launched standoff missile or a submarine launched torpedo. The remaining surface combatants in the PLAN's order of battle would meet much the same fate, as they are even less capable than the Sovremennyy and possess limited electronic counter measure, fire control, and navigation systems.<sup>94</sup> Additionally these articles fail to mention that the PLAN's submarine force, while plentiful in numbers, is simply not very effective. The bulk of its forces, composed of the older soviet-designed Romeo submarines, rarely leave the pier, perhaps because of a lack of sufficiently trained crews.<sup>95</sup> Its nuclear fleet has been deemed relatively ineffective as well. The Han SSN is considered noisy and suffers engineering design problems, and the Xia

.

<sup>&</sup>lt;sup>91</sup> David Isenberg, "China Buys Russian Vessels to Mount Naval Challenge to U.S." Navy News Week, 18 November 2002.

<sup>&</sup>lt;sup>92</sup> Bill Gertz,. "China test potent, supersonic anti-ship cruise missiles" The Washington Post, 25 September 2001.

<sup>&</sup>lt;sup>93</sup> Cole, 99.

<sup>&</sup>lt;sup>94</sup> Goodman and Segal, 81.

<sup>&</sup>lt;sup>95</sup> Cole, 97.

SSBN rarely puts to sea. 96 The exception to this is the Kilo, which, as the media does correctly highlight, is an extremely capable platform; however, the small number in the PLAN's total force structure may serve to counteract this advantage. Furthermore, the submarine is at a disadvantage in that it must surface every four days to recharge its batteries, making it vulnerable to superior American anti-submarine tactics. It remains to be seen if the next generation submarine, the Type 093 SSN, will improve this situation. Additionally, In terms of aircraft, until the full incorporation of the Su-27, Su-30MKK, or future production J-10 into the inventory, the PLAN will lack a credible air force to counter an American CVBG. The vintage F-6s and F-7s operated by the PLAN would be of no match for U.S. tactical aircraft, and the F-8 with an underpowered engine has proved to be lacking in performance as well. 97

Another major detracting factor is the PLAN's failure to adopt the correct doctrine and training to employ its new hardware acquisitions properly. The PLAN still relies on a platform-centric approach to naval warfare in contrast to the Western approach of networkcentric in which all units in an engagement are linked via a computer and satellites. 98 The PLAN employs ships and aircraft independently of one another and thereby fails to achieve a principle of warfare that American doctrine holds vital—synergy. In a fleet engagement at sea against a coordinated CVBG strike, this strategy would prove fatal. This limitation in doctrine shows no appreciable chance of rectifying itself in the near term, as PLAN requests for future requirements show no additional upgrades to existing ship and shore based command and control systems.<sup>99</sup> Additionally the PLAN has been quite slow in mastering

<sup>&</sup>lt;sup>96</sup> Cole, 98.<sup>97</sup> Goodman and Segal, 82.

<sup>&</sup>lt;sup>99</sup> Cole, 111.

the new technology of the platforms. This is in part due to the reluctance of the CMC to submit control of the modernization effort to foreign hands and to problems with retrofitting incompatible Soviet technology with Western-designed equipment. <sup>100</sup>

While the PLAN is highly capable, it will remain a regional naval force and subject to American CVBG intervention. The primary factor leading to this conclusion is the absence of an aircraft carrier in China's fleet. The PRC's prospects for acquiring one remain in speculation; however, without this instrument of power projection the PLAN will be unable to exert its influence beyond its EEZ. Furthermore, the continued development of relatively small classes of surface combatants, i.e. destroyers, do not lead to the conclusion that the PLAN will acquire the ability to project blue-water power any time within the next decade or possibly two decades. Economically, the CCP has immersed itself in a symbiotic framework with the major and minor powers of the world. To pursue an aggressive agenda of hegemony in the South China Sea would seem to be against its interests, given its high level of interdependence with not only the peripheral powers but with America as well. Therefore, the CCP will maintain the PLAN at its current level, and although it will continue to modernize, it will never achieve what one of its foremost proponents, Admiral Liu Huaquing, had ultimately wished for it—blue-water status. However, the PRC is an ambitious nation, and the tides of politics and power change quickly, and thus the PLAN will always bear considerable watching.

-

<sup>&</sup>lt;sup>100</sup> Goodman and Segal, 81.

# **Bibliography**

- August Oliver, "Taiwan Fears grow as China buys new subs" <u>The London Times</u>, 12 June 2002
- Berenburg, Alex. "In Deng's shadow: The legacy of Jiang Zemin." <u>Harvard</u> InternationalReview; Cambridge; Winter 2002
- Bernstein R. and Munro R., <u>The Coming Conflict with China</u> New York, NY: Alfred A. Knopf, 1997.
- Bruce, Ian, "China's submarine threat could tip power balance." <u>The Glasgow Herald</u>, 26 June, 2002.
- Cole, Bernard D. Great Wall at Sea Annapolis, Maryland: Naval Institute Press, 2001.
- "China's GDP to Top 10 Trillion Yuan in 2002" <u>Peoples Daily</u>, 09 December 2002, Business section.
- "Constitution of the People's Republic of China" <www.uniwuerzburg.de/law/chooooo\_. html. > 10 Oct 2001
- Deng ,Yong, "Hegemon on the Offensive: Chinese Perspectives on U.S. Global strategy,"

  <u>The Academy of Political Science, Political Science Quarterly</u> Volume 116 No. 3

  Fall 2001.
- "FDI to China to Top US \$40b in 2002: DBS" <u>Peoples Daily</u>, 19 November 2001, Business section.
- Gertz Bill, "China test potent, supersonic anti-ship cruise missiles" <u>The Washington Times</u>, 25 September 2001.
- Gertz, Bill. <u>The China Threat: How the Peoples Republic Targets America</u>, Washington D.C: Regnery Publishing, Inc, 2000.
- Guoxing ,J. "China versus South China Sea Security," <u>PACNET NEWSLETTER 1998</u>, <u>Center for Strategic and International Analysis</u> 24 April 1998.
- Isenberg, David, "China Buys Russian Vessels to Mount Naval Challenge to U.S." <u>Navy News Week</u>, 18 November 2002.
- Kondapalli ,Srikanth. China's Naval Structure and Dynamics," <u>Strategic Analysis: A</u> Monthly Journal Of the IDSA Oct 1999 Vol XXIII no.7.

- Kondapalli, Srikanth, "China's Naval Training Program," <u>Strategic Analysis: A Monthly</u> Journal Of the IDSA Nov 1999 Vol XXIII no.8
- Lam, Willy Wo-Lap, The ERA of Jiang Zemin New York, NY: Prentice Hall, 1999.
- Pomfret John, , "China to Buy 8 More Russian Submarines", <u>The Washington Post</u>, 25 June 2002.
- Mahan, Alfred Thayer, <u>The Influence of Sea Power upon History</u>, <u>1660-1783</u>, New York, NY 1890 repr. Hill and Wang, 1985.
- Morrison ,Wayne M. "CRS Issue Brief: China's Economic Conditions," <u>Economics</u>
  <u>Division, CRS Federation of American Scientists</u>. 15 July 1998, <www.fas.org>
- Office of the Secretary of Defense, <u>Annual Report on the Military Power of the People's Republic of China</u>, 2002, (Washington, D.C: 2002)
- Sakhuja, Vijay. "Maritime Power of the People's Republic of China: The Economic Dimension" <u>Strategic Analysis: Monthly Journal of the IDSA</u>, February 2001 Vol XXVI no. 11, 3., <www.ciaonet.org>.
- Sakhuja, Vijay. "Dragon's Dragonfly: The Chinese Aircraft Carrier," <u>Strategic Analysis:</u>
  <u>A Monthly Journal Of the IDSA</u> Oct 2000 Vol XXIV no.7.
- Scobell ,Andrew, Wortzel , Larry, eds. "China's Growing Military Power: Perspectives on Security, Ballistic Missiles, and Conventional Capabilities", <u>Strategic Studies Institute</u>, (Carlisle Bks, Penn: U.S. Army War College, Sept 2002), 64.
- Segal, Gerald and Yang, Richard, eds., <u>Chinese Economic Reform, The Impact on Security</u> New York, NY: Routledge, 1996..
- Sing ,Swaran. "Continuity and Change in China's Maritime Strategy," <u>Strategic Analysis: A Monthly Journal Of the IDSA</u> Dec 1999 Vol XXIII no.9.
- Smith ,Mike and Khoo ,Nicholas, "China and US Foreign Policy in the Asia Pacific: Living with American Dominance" <u>The Royal Institute of International Affairs</u> <u>Briefing Paper New Series</u>, No. 22 June 2001.
- The Australian "Silent Subs deal gives China Edge", 13 June 2002.
- Yang, Richard, Segal Gerald, eds., China Rising New York, NY: Routledge, 1997.

# **Annex A: China Map**

